

## CLAIMS

What is claimed is:

1. A self calibrating network comprising:

5                   a first node transmitting a calibration data packet; and  
                  a second node receiving said calibration data packet and  
determining a calibration value for said second node to optimize the  
transfer of data from said first node to said second node.

10                 2. The self calibrating network according to claim 1,  
wherein:

                  said second node stores said calibration value in a  
calibration memory.

15                 3. The self calibrating network according to claim 1,  
wherein:

                  said calibration data packet contains a node identification  
associated with said first node.

20                 4. The self calibrating network according to claim 1,  
wherein:

                  said second node repeatedly accepts copies of said  
calibration data packet from said first node until the transfer of data from  
said first node to said second node is optimized.

25                 5. The self calibrating network according to claim 2,  
wherein:

                  said calibration memory stores said calibration value  
associated with a node identification.

6. The self calibrating network according to claim 1,  
wherein:

5        said first node repeatedly transmits a calibration data packet  
until said second node acknowledges an optimal calibration value has  
been determined.

7. The self calibrating network according to claim 1,  
wherein:

10      said one of said first node or said second node issues a  
network lock command on the network, ceasing nodes other than said first  
node or said second node from communicating on the network.

8. The self calibrating network according to claim 7,  
wherein:

15      said first node or said second node issues an unlock  
command on the network, giving permission to all nodes on the network to  
again begin communication.

9. A method for self calibrating a network comprising:

20      transmitting a calibration data packet from a first node; and  
receiving said calibration data packet by a second node and  
determining a calibration value for said second node to optimize the  
transfer of data from said first node to said second node.

25      10. The method for self calibrating a network according to  
claim 9, further comprising:

          storing said calibration value in a calibration memory.

11. The method for self calibrating a network according to  
claim 9, further comprising:

associating a node identification associated with said first  
node in said calibration data packet.

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12. The method for self calibrating a network according to  
claim 9, further comprising:

repeatedly accepting copies of said calibration data packet  
by said second node from said first node until the transfer of data from  
10 said first node to said second node is optimized.

13. The method for self calibrating a network according to  
claim 10, further comprising:

storing in said calibration memory said calibration value  
15 associated with a node identification.

14. The method for self calibrating a network according to  
claim 9, further comprising:

repeatedly transmitting from said first node a calibration data  
20 packet until said second node acknowledges an optimal calibration value  
has been determined.

15. The method for self calibrating a network according to  
claim 9, further comprising:

25 issuing from said one of said first node or said second node  
a network lock command on the network, ceasing nodes other than said  
first node or said second node from communicating on the network.

16. The method for self calibrating a network according to  
claim 15, further comprising:

issuing from said first node or said second node an unlock  
command on the network, giving permission to all nodes on the network to

5 again begin communication.

17. A means for self calibrating a network comprising:

a transmitter means for transmitting a calibration data packet  
from a first node; and

10 a receiver means for receiving said calibration data packet  
from said first node and determining a calibration value for said second  
node to optimize the transfer of data from said first node to said second  
node.

15 18. The means for self calibrating a network according to  
claim 17, further comprising:

a storage means for storing said calibration value in a  
calibration memory.

20 19. The means for self calibrating a network according to  
claim 17, further comprising:

an associate means for associating a node identification with  
said first node in said calibration data packet.

25 20. The means for self calibrating a network according to  
claim 17, further comprising:

a repeated acceptor means for repeatedly accepting copies  
of said calibration data packet by said second node from said first node  
until the transfer of data from said first node to said second node is  
30 optimized.

21. The means for self calibrating a network according to  
claim 17, further comprising:

a storage means in said calibration memory said calibration  
value associated with a node identification.

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22. The means for self calibrating a network according to  
claim 17, further comprising:

a repeated transmitter means repeatedly transmitting from  
said first node a calibration data packet until said second node  
10 acknowledges an optimal calibration value has been determined.

23. The means for self calibrating a network according to  
claim 17, further comprising:

an issue means for issuing from said one of said first node  
15 or said second node a network lock command on the network, ceasing  
nodes other than said first node or said second node from communicating  
on the network.

24. The means for self calibrating a network according to  
20 claim 23, further comprising:

an issue means for issuing from said first node or said  
second node an unlock command on the network, giving permission to all  
nodes on the network to again begin communication.

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